

SEVERE THUNDERSTORM REPORTING REFERENCES

CLOUD IDENTIFICATION REFERENCE



Shelf Cloud (A)

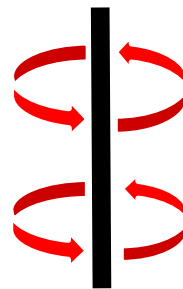
- A horizontal, shelf-like cloud on the leading edge of the thunderstorm
- Signals the approach of the downdraft, which includes heavy rain, gusty winds, and sometimes hail
- **ID Tip:** Slopes *away* from the rain
- **Beware:** Shelf clouds can appear to touch the ground, and can look different when viewing from the side
- Can rotate about a **HORIZONTAL** axis
- No need to report to the NWS

Wall Cloud (B)

- A **ROTATING** lowering from a T-storm updraft base. Often precedes a funnel cloud and tornado.
- Rotation must be about a **VERTICAL** axis
- **ID Tip:** Slopes down and *towards* the rain

Funnel Cloud (C)

- A **VIOLENTLY ROTATING** column of air that is **NOT** in contact with the ground
- Rotation must be about a **VERTICAL** axis
- **ID Tip:** Rapidly rotating cloud edges look smooth (versus ragged).



Tornado (D)

- A **VIOLENTLY ROTATING** column of air in contact with the ground
- Rotation must be about a **VERTICAL** axis
- **ID Tip:** Rapidly rotating cloud edges look smooth (versus ragged). To see if it is contact with the ground, look for debris or dust circulating at the surface.

Rotation about
a vertical axis

SCUD (E)

- Harmless, ragged looking clouds that do NOT rotate
- Can move up and down, may look turbulent. May look like they are touching the ground
- Responsible for a majority of false funnel cloud and tornado reports
- **ID Tip:** Edges of the cloud look ragged (instead of smooth like rapidly rotating clouds).

WIND SPEED ESTIMATION CHART

25-31 mph	Large tree branches moving. Wires whistle.
32-38 mph	Whole trees moving. Some difficulty when walking into the wind.
39-46 mph	Small branches or twigs break off. Cars veer when driving.
47-54 mph	Slight structural damage (shingles blown off). Large branches break off.
55-63 mph	Structural damage (parts of roofs blown off). Trees uprooted or snapped off.
64-73 mph	Widespread structural damage (whole roof removed, walls blown in, etc.)

HAIL SIZE ESTIMATION CHART



PLEASE REPORT THE FOLLOWING IMMEDIATELY TO THE NWS

REMEMBER: TIME, EVENT, LOCATION

Wind damage	-Large healthy limbs, structural damage, or trees uprooted
Hail	-Any size! Report the size of the largest stone!
Flooding	-Water rising rapidly, flowing over roads, flooding buildings
Rotation	-Wall clouds, funnel clouds, and tornadoes

NWS NORTHERN INDIANA CONTACT INFO

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Locally arranged communications methods



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